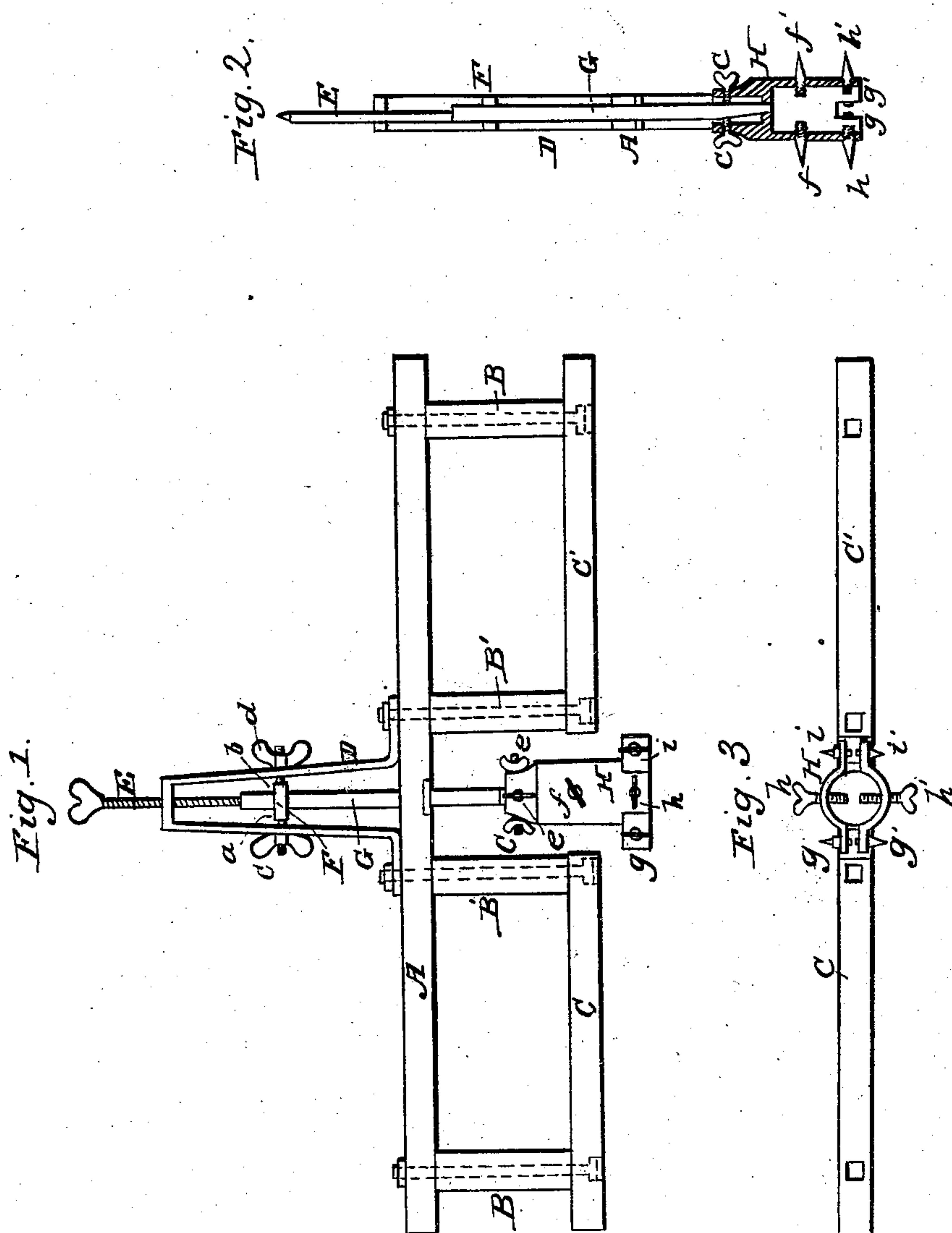


CARLISLE & ESTABROOK.

Millstone Dress.

No. 4,724.

Patented Aug. 28, 1846.



UNITED STATES PATENT OFFICE.

CHARLES CARLISLE AND EDWIN ESTABROOK, OF NORWICH, VERMONT.

DRESSING MILLSTONES.

Specification of Letters Patent No. 4,724, dated August 28, 1846.

To all whom it may concern:

Be it known that we, CHARLES CARLISLE and EDWIN ESTABROOK, of Norwich, in the county of Windsor and State of Vermont, have invented a new and useful Machine to be Used in Dressing the Grinding-Faces of Millstones; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a front elevation of the said machine; Fig. 2 a transverse and central section of it; Fig. 3 is a view of the under side or bottom of the socket, to be hereinafter described.

To enable others skilled in the art to make and use our invention, we will now proceed to describe its construction and operation.

To a square piece of timber, (A, Figs. 1 and 2) of convenient size, and corresponding in length to the diameter of the stone to be dressed, we attach near each end thereof, and perpendicular thereto, a pillar B, of wood; and at equal distances from and on each side of the center of the said timber A, another pillar B', should be similarly attached. To the bottoms of these pillars two others pieces C, C', of square timber are applied and secured in such manner as to leave the space between their inner ends sufficiently large to receive the socket H, and allow of its free operation. The said pieces of wood A, C and C' and pillars B B', B B', should be fastened together by means of iron-bolts, passing up through the bottom timbers and the pillars, and secured upon the top of the upper timber, by means of nuts, turning upon the screws made upon the upper ends of the bolts, the said screw bolts being represented by dotted lines. Attached to the top of the upper timber, is an iron stirrup D, fastened by two of the aforesaid bolts on each side of the center, and rising a suitable distance above the beam A, as seen in Fig. 1. A vertical screw E, should be made to pass and work through the top of the stirrup. Near the middle of, and within the stirrup, the bearing F, is arranged. It consists of a plate of iron or other metal of a width somewhat less than the space between the sides of the stirrup. It is held in its place by screws a, b, which project from it, and respectively pass

through the opposite sides of the stirrups, and are secured by nuts c, d, on the outside. Through a perforation made downward through the center of the upper timber A, an iron shaft G, is passed, and also up through the bearing F, and abuts against the screw E. To the lower end of this shaft the socket H, is secured by means of screws e, e, &c., which extend through the upper part of the socket. The socket is made hollow in order to receive the spindle which passes through the nether millstone. About midway of the socket on each side is a screw f f', by which the socket is farther confined to the spindle. Near the lower end of the socket are three screws upon each side g h i, g', h' i', which pass through the side of the socket; the central screws h, h', are also for the purpose of securing the socket to the spindle. The outside screws are for the purpose of fastening the socket to the bale of the upper millstone, when the said stone is to be dressed. The perpendicular shaft G, should be of sufficient length to reach from the lower side of the upper timber A, to the top of the stirrup D, and the perpendicular screw E should also be of sufficient length to reach from the top of the stirrup to the bearing E, near the middle of the stirrup. The open space between the internal end of the lower timber C, C', and internal pillars B, B', should be of sufficient width to span the eye of the millstone, and allow the socket to revolve, and the depth of the open space should be at least one inch more than the length of the socket. The timbers C, C', posts B B', B, B', and stirrup D, we denominate the frame.

The machine when put together is placed upon that surface of the millstone which is to be dressed; the under side of the lower timber C, C' being previously covered with coloring matter. The socket should next be made fast to the spindle or bale (as the case may be) by means of the aforementioned screws, which pass through the sides of the said socket. The shaft G, is next to be adjusted as may be necessary, by means of the screws which confine it in the upper end of the socket. The frame is next let down (by means of the perpendicular screw E, at the top of the stirrup,) so as to carry the timber C, C', in contact with the face of the stone. The frame is then revolved, and if found not perfectly parallel to the face of the

stone, it should be rendered so by means of the adjustable screws and nuts of the bearing F. When thus adjusted the frame is revolved upon the stone, and any inequalities upon the face thereof are detected by means of the coloring matter upon the lower timbers. The perpendicular screw acts upon the top of the shaft by which means the whole frame may be raised or lowered at pleasure. This machine may also be used for dressing stones to which no spindle or bale are attached, the same being effected by inserting into the eye of the stone, a piece of wood, to which the socket may be attached.

What we claim as our invention and desire to secure by Letters Patent, is—

The combination of the frame herein described with the socket, adjustable shaft, and elevating screws, constructed, and arranged substantially as above set forth.

In testimony whereof we have hereto set our signatures this 20th day of August, A. D. 1846.

CHARLES CARLISLE.
EDWIN ESTABROOK.

Witnesses:

GEO. LYMAN,
IRA DAVIS.